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CABO YACHTS
ELECTRICAL TROUBLESHOOTING
FAIRING A MEGAYACHT
BOATBUILDING IN EASTERN GERMANY

The Amazing Mister Moesly

ALL ARTWORK COURTESY CARL MOESLY EXCEPT WHERE NOTED

The saga of Sea Craft—the company and the boat, one of the finest small powerboat hullforms ever devised—cannot be separated from the true adventures of the man who created both.

BY STEVE C. D'ANTONIO

This is the unfinished story of Carl Moesly, founder of Sea Craft, a small but highly successful production powerboat company in the 1960s in South Florida. I say "unfinished" because he's alive and well in the western mountains of North Carolina. As a boy, Moesly was fascinated by boats, boatbuilding, and great adventures. As a young man, his interest in flying led him into uniformed service in the dangerous skies of World War II. In the postwar decades, he became, by turns, a commercial aviator, entrepreneur, boat designer/engineer/manufacturer, and three-time circumnavigator (once by air and twice under sail).

Clearly, Carl Moesly has lived under a favored star. How else to explain his surviving an alligator attack, rattlesnake bites, a ride in a B-17 bomber flown below the rim of the Grand Canyon at sunset, not to mention more than a thousand hours of combat flight time. He also hitchhiked through South Africa and Rhodesia during a civil war (past armed rebels and military checkpoints), simply because he wanted to see what explorer Dr. David Livingstone had seen in 1856: Victoria Falls, one of the world's natural wonders.

Finally, among his many other accomplishments, there is the estimable record in offshore powerboat racing in craft of his own design and construction—consumer versions of which are still prized today by saltwater anglers who appreciate an unusually responsive and seakindly hullform.

The Early Years

It would be difficult to understand the genesis of Sea Craft without understanding Carl Moesly's own history. Moesly grew up in the Fort Lauderdale and Miami of the 1920s and '30s—very different places then from what they are now. His family was of modest means; both Moesly's mother and father were first-generation Swiss immigrants who eloped to the United States. Moesly's childhood had much in common with brothers Bud and Sandy Ricks of the film *Flipper;* that is, a great deal of Moesly's time was spent on, around, or in the warm waters of what was then a sparsely populated South Florida. "My parents," says Moesly, "believed in allowing me

Boatbuilding has long been blessed with an abundance of interesting individuals (compared to other industries), but few biographies can top Carl Moesly's. Not least of his numerous achievements were world-record offshore racing performances ***(facing page)*** *in outboard boats of his own design and manufacture, which he also helmed. Racing, Moesly came to realize, was the best advertisement for his line of Sea Craft boats, and helped refine their construction. One pioneering development he introduced was a center console in an offshore-capable open boat* ***(above)****.*

to learn about life by doing things and making mistakes."

Since Moesly's family home abutted Fort Lauderdale's New River, boat building and repair came naturally to him, occupying much of his time when he wasn't busy with school. His interests and capabilities progressed from toy models and tin boats (he built a crude kayak made from hurricane-scrap tin roofing, a material in no short supply in those parts at that time), to rowboats, sailboats, and eventually a 32′ (9.7m) inboard. Moesly's first seagoing project was a small centerboard sloop built in partnership with another boy when he was just 13. Sixteen feet (4.9m) long, V-bottomed, and made from scrounged materials (cypress planking and galvanized nails), her deck was sheathed in feed sacks set in wet house paint, while the mast was made from an 8″-dia (3.1cm) cypress tree felled at the edge of the Everglades. Sails were white duck purchased at the local Sears & Roebuck, and sewn together on his mother's sewing machine while she was out of town. (Moesly said his mom always wondered why the machine never sewed straight after that.)

This project occupied several months and tested Moesly's powers of improvisation. He even fitted the bottom with a small pane of window glass, making it a glass-bottomed boat, a detail that, Moesly recollects, induced seasickness among his crew while sailing the choppy waters off Fort Lauderdale. The centerboard leaked constantly, requiring regular caulking applications—thereby providing additional practical lessons in small-craft design and construction.

When Moesly was 16, he told his father he wanted to learn how to build a larger boat, one bigger than his 16-footer, which he had by now traded to a friend for an 8′ (2.4m) skiff powered by a Sears outboard (referred to as a "Sears and Row Back" by Moesly and his mates). Moesly lamented that his dad seemed uninterested in his wanting to build a bigger, more sophisticated boat.

But a few weeks later, a truck arrived at the Moesly home with a load of lumber. Moesly assumed this was for one of his father's construction projects and gave it no further thought. When his father returned home from work that evening, Moesly asked his dad, "What's the lumber for?" His father responded, "Well, you said you wanted a bigger boat."

Turning that lumber pile into a boat became Moesly's obsession for the next two years: every day after school, evenings until nine, and weekends. It wrecked his social life, he recalls with a grin, but it was well worth it. The entire project was completed without benefit of a single power tool. Each evening, Moesly's dad would return home, inspect Moesly's progress, and then offer a critique and plan for the next day's work.

Moesly's father and older brother, who was already an accomplished seaman, provided the basis for the design, with some input from Carl. The on-deck measurement of 32′ (9.7m) was determined by the length of the keel timber. Ribs were cypress, planking was juniper, fastenings were galvanized, and the power plant was a Buick straight-eight salvaged from a wrecked automobile. A standard transmission, complete with clutch, provided a reverse gear; the exhaust manifold was a dry stack, which came in handy for heating coffee during chilly evening fishing expeditions. At 28 mph (45 kph), she was one of the fastest small boats in town. Moesly remembers her as having pleasing lines, and, he says, "Nothing could touch her in a seaway."

When Moesly was just 15, he undertook his first solo offshore passage. In 1936, Moesly set off in a 15′6″ (4.7m) Snipe one-design that belonged to his sweetheart and wife-to-be, Jeanne. Moesly sailed to the Florida Keys, anchoring out between Pumpkin Key and Key Largo, where he was feasted on by swarms of sand flies and mosquitoes. Not wishing to endure another night of that, he left the Keys astern and pointed the Snipe's bow eastward, toward the Bahamas.

Moesly built his first sophisticated powerboat, a 32' (9.7m) inboard, at the age of 16. Fitted with a barely marinized Buick straight-eight, it was one of the fastest boats for its size in the Fort Lauderdale of his youth. Moesly's father supplied the materials, and his father and older brother provided guidance with the design. But the project was Carl Moesly's, start to finish.

With nothing more than a pocket compass, a few cans of peaches, a couple of peanut butter sandwiches, and $5.50, he and the Snipe struck out for their first foreign landfall.

After a difficult, squall-laden Gulf Stream passage, a local Bahamian addressed him as "captain" and asked his opinion on the impending hostilities in Europe. Although he'd just completed the first half of a man's voyage, Moesly was still a mere boy. He had no notion of war and little of international current events—until these residents, subjects of a British Crown under increasing pressure in Europe, solicited his thoughts on the topic. Not knowing what to say and afraid of giving the wrong answer, he said nothing.

With the onset of World War II, Moesly's interest shifted from boats to planes. He was an aviator throughout the war, piloting multiengine aircraft for the most part, and ultimately accruing a thousand hours of combat flight time. After the war he worked in commercial aviation, both as a private pilot and as an expert in the repair and conversion of military aircraft for civilian applications. So-called executive planes like this amphibian were one of his specialties.

Career Number One: Aviation

Moesly reached adulthood just in time to take part in that war. He logged over a thousand hours of combat flight time, mostly in multiengine cargo aircraft. Following the war, Moesly found employment in civil aviation, working for a charter airline and air cargo transporter, and finally for a firm involved in the conversion of military aircraft to civilian use.

While operating the aircraft conversion facility, Moesly became acquainted with one of the company's better customers, Arthur Vining Davis. Davis had contracted to have an executive aircraft built to complement his already sizable fleet. Davis was one of the nation's wealthiest individuals and a well-known philanthropist. (He'd formed, with Charles Martin Hall, what would later become the giant Alcoa Corporation.) Even though he employed two pilots, Davis asked Moesly to fly him on the maiden flight of his new aircraft to a board meeting in Pittsburg, and specifically requested Moesly on several subsequent flights, too. During one of these, he said to Moesly, "If you're ever without a job, I may have a position for you."

The relationship with Davis would turn out to be fateful. Unable to raise capital with which to invest in the fast-growing but technically complex business of servicing and converting jet aircraft, the company Moesly worked for divested itself of all aviation interests, opting for a more secure but less capital-intensive line of commerce: real estate.

So Moesly went to work for Davis, as supervisor of his aviation interests. The more Moesly came to know Davis, the more his respect for the man grew. At the time of Moesly's employment, Davis owned about 12% of the land in Dade County (which includes the greater Miami area), along with some 20 major industrial enterprises, and controlling interest in two airlines. Davis' stable of personal aircraft included two executive DC-3s (whose conversions Moesly supervised), two AeroCommanders, an executive PBY amphibian, and two helicopters.

On the day that Cuban dictator Batista abdicated his rule to Fidel Castro (in 1959), Davis sent Moesly into Cuba on a mission to rescue a close friend of Davis'. Moesly landed at a remote airstrip near the man's ranch, and transported him and his family and only the possessions they could carry with them. Davis' friend said to Moesly as soon as they'd cleared Cuban airspace, "Yesterday, I was a multimillionaire. Today I have $150 in my pocket."

Production Boat Building

Due to his failing health, Davis' doctors advised him not to fly anymore. This left Moesly potentially out of a job. Davis, though, had plans for Moesly. Davis asked him to attend a meeting in Miami in the penthouse suite of the DuPont Plaza Building, overlooking Biscayne Bay, in June 1960, with Davis and Dennis Kendall, the president of American Marc, a company owned by Davis.

The ambitious plan set forth that afternoon called for American Marc to produce 6,000 recreational boats in 12 months, utilizing a plant yet to be constructed somewhere east of the Mississippi. Davis asked Moesly, whom he knew had boatbuilding experience in addition to aircraft maintenance and conversion, if he would take charge of setting up a boat plant in Miami. Moesly, with little to do in the way of aviation work for Davis, readily agreed. What Moesly did not reveal was just how little knowledge he had of production boatbuilding, particularly with the relatively new medium of fiberglass. But lack of experience did not deter Moesly. (It hadn't deterred him as a young Army Air Corps lieutenant, either, when he sat behind the controls of a P-51 Mustang fighter for the first time. The difference now was that production fiberglass boat building offered no flight manual to study before takeoff.)

American Marc, headquartered in California, had for years specialized in manufacturing diesel-powered irrigation pumps and generators. The company also made a 10-hp diesel (7.5-kW) outboard (a short-lived venture), in addition to fiberglass boats, which were outsourced.

At the request of Davis and Kendall, Moesly visited the home office and production facilities in California. Moesly was unimpressed by what he saw: the operation

appeared to be grossly inefficient; the boat models being produced were an odd collection of designs bearing little family resemblance; and quality control was mediocre at best. Moesly's overall assessment was that while the designs might be well-suited to small lakes, they were certainly not up to the task of satisfying Florida and other East Coast customers, especially saltwater anglers, who often used their boats in less-than-ideal weather and sea conditions.

Nevertheless, American Marc's California factory management insisted on sending existing models and molds to Florida, to establish a Fort Lauderdale-based sales group and dealership network. Moesly surveyed these boats as they were unloaded from railroad cars in Fort Lauderdale, and quickly confirmed his original opinion: the boats were wholly unsuitable for Florida and East Coast clientele.

The factory insisted on a test, this time under way, and Moesly obliged. He decided that the test should be rigorous and realistic. He entered one of the American Marc models, powered by a single 75-hp (56-kW) Johnson outboard, in the 1960 Miami-to-Nassau Offshore Race. After experiencing just a few minutes of light chop during a test run immediately prior to the race, the glass fell out of the windshield, the deck separated from the hull, bulkhead tabbing failed, and the transom developed some long, ominous cracks.

Once again, Moesly reported the inadequacy of the design, explaining that he ran the boat no differently than a fisherman might on a rough day. And once again, the home office was not pleased with his report. What American Marc did do, though, was drastically downsize the initial projection of 6,000 boats in the first year of operation. Adding to these difficulties, consider that fiberglass boat building was still in its infancy, and therefore skilled labor to staff the new factory was virtually impossible to find. Each new employee had to be trained in the most basic techniques of single-skin construction.

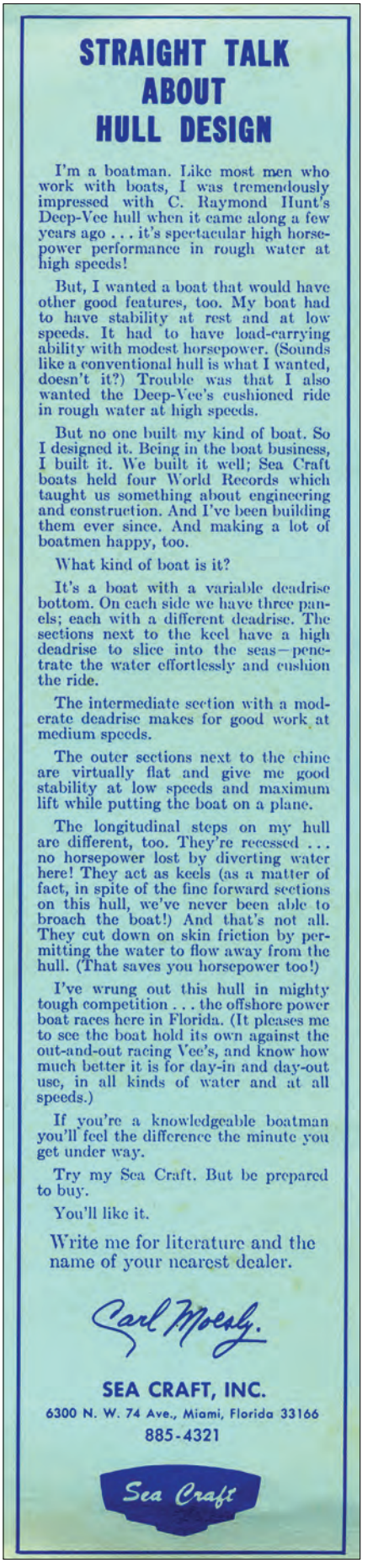
Several additional business factors coincided in 1961 to further dim American Marc's plans. A.V. Davis' health continued to decline, and the California operation, with its new 96,000-sq-ft (8,919-m²) boat factory, now presented a financial drag on the organization. Moreover, a reliable and marketable diesel outboard remained an unobtainable goal, and American Marc's pump division sales slumped. Davis' management team advised selling the company to an investor, who, in turn, opted to sell off the individual divisions piecemeal.

Moesly was given an opportunity to bid on the assets and the Miami inventory, including 80 completed boats along with those still in process. Being intimately familiar with the operation, Moesly found his offer accepted, enabling him to set a boatbuilding plan of his own in motion. By February 1961 Moesly was running the company under his name, primarily to establish a viable production line. Given just 30 days to vacate the existing factory, he moved to a much smaller facility in south Miami—and quickly sold off all product on hand at fire-sale prices.

Sea Craft Is Born

Absent a stable of better designs, though, Moesly was left with no

Moesley's postwar aviation career enabled him—by fits and turns, as discussed in the main text—to return to boats and boatbuilding in his native South Florida. Fiberglass construction was then new to the region; Moesly had to master the medium himself before he could train a reliable workforce. Once up and running, the Sea Craft plant in Miami was selling product at a brisk pace. ***Right—****Moesly's brief but eloquent broadside describes the virtues and rationale of his patented hullform, a silhouetted section of which served as the Sea Craft logo.*



STRAIGHT TALK ABOUT HULL DESIGN

I'm a boatman. Like most men who work with boats, I was tremendously impressed with C. Raymond Hunt's Deep-Vee hull when it came along a few years ago . . . it's spectacular high horsepower performance in rough water at high speeds!

But, I wanted a boat that would have other good features, too. My boat had to have stability at rest and at low speeds. It had to have load-carrying ability with modest horsepower. (Sounds like a conventional hull is what I wanted, doesn't it?) Trouble was that I also wanted the Deep-Vee's cushioned ride in rough water at high speeds.

But no one built my kind of boat. So I designed it. Being in the boat business, I built it. We built it well; Sea Craft boats held four World Records which taught us something about engineering and construction. And I've been building them ever since. And making a lot of boatmen happy, too.

What kind of boat is it?

It's a boat with a variable deadrise bottom. On each side we have three panels; each with a different deadrise. The sections next to the keel have a high deadrise to slice into the seas—penetrate the water effortlessly and cushion the ride.

The intermediate section with a moderate deadrise makes for good work at medium speeds.

The outer sections next to the chine are virtually flat and give me good stability at low speeds and maximum lift while putting the boat on a plane.

The longitudinal steps on my hull are different, too. They're recessed . . . no horsepower lost by diverting water here! They act as keels (as a matter of fact, in spite of the fine forward sections on this hull, we've never been able to broach the boat!) And that's not all. They cut down on skin friction by permitting the water to flow away from the hull. (That saves you horsepower too!)

I've wrung out this hull in mighty tough competition . . . the offshore power boat races here in Florida. (It pleases me to see the boat hold its own against the out-and-out racing Vee's, and know how much better it is for day-in and day-out use, in all kinds of water and at all speeds.)

If you're a knowledgeable boatman you'll feel the difference the minute you get under way.

Try my Sea Craft. But be prepared to buy.

You'll like it.

Write me for literature and the name of your nearest dealer.

Carl Moesly.

SEA CRAFT, INC.
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Sea Craft

Moesly's early racing successes occurred in a beefed-up powercat that he "inherited" from American Marc, a boat company he'd bought so as to transform its assets into what would become Sea Craft. Mercury Marine's Carl Kiekhaefer liked Moesly's spunk and ingenuity; thereafter, Moesly's boats wore Mercs, and he was given access to Mercury's fabled Lake X test bed.

choice at first but to continue to build the 15 American Marc models. He knew this was a losing proposition, but he had to buy time. Moesly eventually took the molds to a vacant lot in Miami (there were still vacant lots in those days) and set them ablaze. The fire was hot and fast, Moesly remembers, giving him firsthand appreciation for how furiously the new boatbuilding material burned.

Until he could decide what to build in their place, Moesly laid off nearly all his employees. Based on his experience in the aviation industry, Moesly knew that the best way to develop a successful product is to test it under adverse conditions. With this in mind, Moesly and Sea Craft—the name he gave his new business—got into offshore powerboat racing.

To start with, Moesly campaigned a beefed-up American Marc catamaran in local races with support from Mercury Marine. As a result, a friendship formed with Mercury founder Carl Kiekhaefer. Kiekhaefer offered Sea Craft the use of Mercury's Florida testing facility at Lake X; Moesly, for his part, allowed Mercury to use Sea Craft boats for racing and for demonstrating Mercury outboards and sterndrives.

With little money or desire to pay professional drivers, Moesly opted to pilot his own entries in offshore races, and in doing so, began to make a name for himself as a hot driver. Racing a recreational catamaran against professional Mercury Marine drivers, Moesly won a nine-hour endurance race in the outboard division, and finished second overall against *inboards*—the best an outboard had ever placed to date.

An Original Design

Moesly knew all too well that he had to come up with an original design with which to set Sea Craft apart from the competition. American Marc's models, for the reasons described above, simply weren't up to the requirements of racing or hard recreational use.

The early Ray Hunt-designed Bertram hulls, particularly the first fiberglass *Moppie* with its deep-V bottom, were of great interest to Moesly. He looked this hull over carefully at its inaugural launching and liked what he saw—with a few caveats. Moesly believed that, while the design had much merit, excessive back-pressure was exerted on the lifting strakes. Although the strakes reduced parasitic drag, Moesly thought they were not ideal for rough water, which is where he wanted Sea Crafts to venture, for offshore racing and fishing. Lots of lift, he knew from experience, made for a hard ride. Further, the high deadrise of a deep-V limited its load-carrying ability and diminished the

With twin 120-hp (89-kW) MerCruiser I/Os, a Sea Craft 21-footer (6.4m) could do 43 mph (69 kmh). Shortly after its introduction, an outboard-powered 21 won its division in the Miami–Nassau, Around Nassau, and Miami–Bimini–Miami races two years in a row, and was overall winner in the Virgin Islands–Puerto Rico Race. The overnighter model featured a windshield, convertible top, 7' (2.1m) bunks, a head, an icebox, and a large cockpit.

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A Sea Craft flybridge model, airborne. Moesly's faith in the seaworthiness—and sturdiness—of his boats was based on sound design and engineering, and extensive personal experience offshore.

boat's lateral stability. He also sought more speed from his hull for a given horsepower. These factors were important to Moesly, since he wanted Sea Crafts to be able to carry a heavier load than competitive boats of similar dimensions.

Distilling all of these notions into a single design demanded some time and research, but they formed the basis for Moesly's innovative longitudinally stepped hull that featured high deadrise along the centerline for comfort and control at high speeds, less deadrise outboard for stability at low speeds, and greater payload capacity overall. And, the design provided good stability—better, he felt, than the constant deadrise of other V-bottomed hulls.

In the spring of 1961, Sea Craft's skeleton crew built a 23′ (7m) plywood prototype, incorporating not only the sequentially stepped hull but another Moesly touch as well: reverse sheer. The latter feature improved visibility for the helmsman while the hull was in a bow-high attitude. It also gave the boat a certain aesthetic, and became a Sea Craft trademark until copied by other builders.

The prototype was built after hours at the Sea Craft plant, with Moesly doing the lofting while a carpenter made the frames. At Lake X, the finished product turned many heads, where it outperformed all official Mercury entries destined to compete in the upcoming Miami–to–Nassau Offshore Powerboat Race. From concept to prototype, Moesly & Co. had completed the 23′ prototype in just five weeks.

The day before the race, Moesly's codriver suggested taking their Sea Craft, now numbered "21," to a Mercury outboard dealership he owned to have the engines tuned for top performance. The following morning, immediately prior to the start of the race, during Moesly's check run, the "21" performed 5 mph slower than in previous tests. Moesly pressed on nevertheless, puzzled by the lost power.

During the race, one of the outboards suffered a carburetor malfunction. Moesly's codriver took 25 minutes to effect a repair at Cat Cay. Despite this delay, No. 21 placed fifth overall and exactly 25 minutes behind a 1,000-hp (746-kW) inboard competitor. Post-race, it was rumored that the Mercury dealer Moesly used had switched powerheads during the tuning session, swapping an old set for Moesly's new units.

The Sea Craft name, along with that of owner and chief designer/engineer Carl Moesly, began to attract media attention. Sea Craft and Moesly were upstarts, competing against larger and better-funded racing teams. Moesly attributes his early racing success to the knowledge he'd gained during his aviation career, and from having spent so much time designing, building, and running small boats in his youth.

Under Moesly's direction, Sea Craft built a 21′ (6.4m) fiberglass version of the prototype, taking advantage of the experience with the "Mark I" model. Changes included modification of the steps and, thanks to the switch from plywood to glass, the addition of compound curves. This new model was put into production as Sea Craft's first original in-house design. With the introduction of that boat, Moesly says he was sure he was "on the right track with the design," and attributed its sales popularity to its success in offshore racing.

R&D and More Racing

The early 1960s were heady times for production boatbuilding, given the transition from wood (timber and plywood) to fiber-reinforced plastic. The new material opened up many possibilities for shapes and increased strength; however, acceptance by the buying public remained slow. In South Florida, fiberglass was catching on, but north of Jacksonville, wariness of the newfangled material ran deep.

Sea Craft's lone salesman at the time took one of the new models to New England in an attempt to sign up dealers. Much to his chagrin, skeptics there were convinced that fiberglass would shatter in cold weather; such people populated many New England dealerships. And, they were quite suspicious of the claim that it didn't require topside paint, *ever*—a claim that turned out to be an exaggeration, perhaps, but was essentially true for the first 10 or more years of the product's life.

Racing proved to be Sea Craft's best marketing strategy: a single winning race generated more boat orders than thousands of dollars' worth of advertisements, with their claims of strength, durability, or speed. Sea Craft dominated the 1967 Miami–Fort Lauderdale–Bimini–Cat Cay–Miami Race, finishing in the first five outboard positions. In the West Palm Beach–Lucaya–West Palm Beach Race of the same year, Sea Craft took

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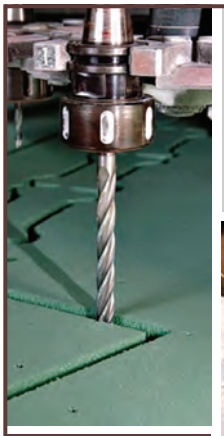

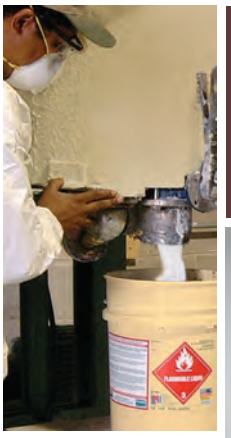

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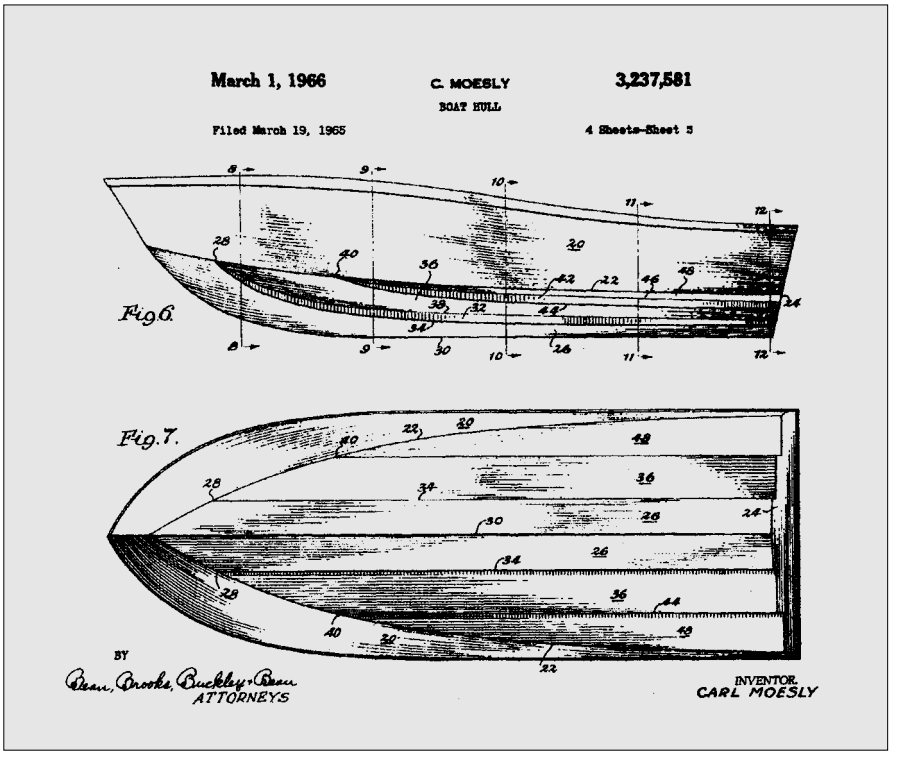
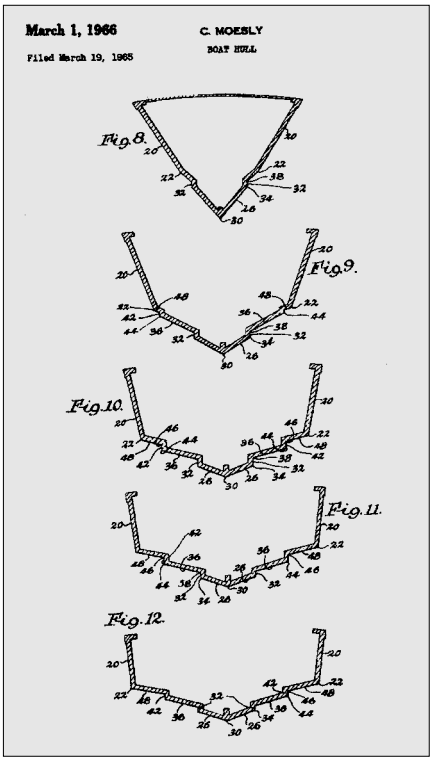
The start of an offshore powerboat race in south Florida in the 1960s. Moesly was self-taught on the race course, but his fortunes there, he felt, were inseparable from Sea Craft's as a company. At one point, Sea Craft boats racked up either first, second, or third places in some 60 starts. "We race for design, engineering, and performance," Moesly said. "And for information gained."

places one through seven in the outboard division. For several years Sea Craft ruled outboard ocean racing. Most of those races saw Moesly as the driver of one of the Sea Craft entries. He was that rare individual who could wear several hats simultaneously and be successful at nearly everything he did—engineering, design, construction, management, and raceboat driving. Granted, he had the assistance of a talented cadre of craftsmen he'd assembled. And, no less important, there was Jeanne, who ran the company's front office and found time to race with him, as well. In Moesly's words, "Racing was done for research and development, to support the production of boats for the public and to prove the efficiency of our design." Moesly also had a fondness for outboards, saying that, "Outboards, unlike inboards, were of equal power and thus enabled an accurate comparison of hull designs."

With each race course victory, interest in Sea Craft grew. Indeed, the company captured the attention of more than just the boating public and





Moesly's registered drawings for the Sea Craft hull. He once described it as a "modified V with a stepped-panel design. Gives excellent rough-water handling and ride. Plus exceptional stability at rest or trolling." Its unique hydrodynamics were analyzed by naval architect Dick Akers as part of an IBEX seminar not long ago on "unconventional hullforms."

race fans. A secretive U.S. government agency also began to show interest in Sea Craft and in Moesly's ideas about small boats. (Even after 40-plus years, Moesly remains reluctant to discuss details of this chapter in his life.) A representative of the agency contacted Moesly in 1962, requesting a test and sea trial of the Sea Craft 21. The agency representative explained to Moesly that his boat would be competing against entries from other manufacturers and the winner would, in all likelihood, receive a lucrative contract from the government to produce a number of hulls.

Moesly agreed to the terms of the test, which took place early one winter day on Biscayne Bay. At the direction of the agency man, Moesly filled his Sea Craft 21 with nine people supplied by the agency, and several hundred pounds of sandbags. (Moesly's recollection is that the men were Hispanic-looking paratroopers. Significantly, these tests occurred during the period of the Bay of Pigs invasion and the Cuban missile crisis.) With this load on board, the Sea Craft 21 and two other boats from competing manufacturers were, as part of the trials, to race across a choppy Biscayne Bay.

The competitors' vessels were unable to get on plane, but the Sea Craft did so with seeming ease. Moesly, in a bit of showmanship and to clinch the deal, pulled alongside his hapless competitors and took from each of them a few sandbags and a passenger. Even with the reduced load, his competition failed to get up on plane. But the Sea Craft did—again, without any perceptible difficulty. Moesly then proceeded to take the agency man and his contingent on a tour not only of Biscayne Bay, but out into open ocean as well.

The stellar performance of the 21 that day won Moesly and Sea Craft "sole supplier" status. (As a sole supplier, Moesly had to agree to a government audit to ensure that the price he was charging was fair.) A third-party "corporation" purchased boats from Sea Craft, some with specifications incorporating so-called hard points, presumably for weapon mounts. The agency rep with whom Moesly had been working told Moesly one day, "We like doing business with you because you're the designer, engineer, builder, and proprietor, and can't pass the buck when something goes wrong."

The success of the Sea Craft 21 in "clandestine operations" led to further orders, one of which called for an air-transportable 27′ (8.2m) version. But someone in the government challenged Moesly's claims about what his boats could do, and made an effort to discredit him. So the 21 and 27 were tested at the David Taylor Model Basin (Bethesda, Maryland) and at Stevens Institute of Technology (Hoboken, New Jersey), in addition to extensive sea trialing on Chesapeake Bay—confirming the stated performance figures for the Sea Craft hulls, and vindicating Moesly and his designs.

While the government contract provided necessary revenue for Moesly and a diversion from conventional sales, it was not enough to carry the day. Knowing that Sea Craft's high quality and winning record are what

A promotional shot of a Sea Craft bowrider. Jeanne Moesly—Carl's wife, Sea Craft's front-office manager, and a racer herself—coined the term. Carl came up with the since much-copied concept, including the split windshield, after watching one couple after another struggle with foredecks, bow lines, and trailers at a public launch ramp in Miami.

rang true with the boating consumer, Moesly continued to develop and improve the Sea Craft line.

Sitting at a launch ramp in Miami one day, Moesly conceived of an idea for a radically different design feature in small powerboats. He noticed how difficult it was for folks, particularly couples, to dock a small boat because of poor access to the bow. The wife was usually sent forward on a slippery deck with a line, while the husband worked the shift and throttle, generally making for an awkward showing at the ramp.

After watching this for a few hours, Moesly went back to his shop and drew up what he thought would be a solution to the problem, and with Jeanne's help coined a name for it: *bowrider*. The initial design included a walk-through windshield, molded-in seats, and—most important to Moesly as an offshore racer—a self-bailing cockpit. The idea harkened back to Moesly's childhood, when he remembered seeing 1930s-era commuter yachts tied up at docks along Fort Lauderdale's waterways, some of which were equipped with forward cockpits.

Moesly didn't like the bowrider name then and still doesn't, but Jeanne did. He deferred to her better

judgment in things of this sort, and so it stuck. Moesly took the prototype, literally under wraps, to the 1963 Miami Boat Show—and it was a hit. Others copied the idea quickly but unbeknownst to them, Moesly had incorporated additional lift into his bow sections in order to compensate for the added weight of passengers forward. Thus, many of Sea Craft's competitors' bowriders handled poorly when loaded, giving passengers a wet ride.

Another innovation introduced by Sea Craft was the unitized grid arrangement, or grillage, for the stringer-and-transverse-frame system. This design supported the boat's bottom, the sole, cockpit, fuel tank, etc. Set and tabbed in place, it dispersed structural loads via interlinking support, much like an aircraft fuselage. *Popular Mechanics* magazine has called the idea "a classic"; it is used to this day in the construction of nearly every production fiberglass hull.

Other clever design ideas continued to spring forth at Sea Craft. The company had built a 19′ (5.8m) open boat for a Bahamian boat dealer in Abaco. He was an old friend of Moesly's from his flying days, and was very specific about what he wanted: a custom open boat for hauling cargo, with a console set off to one side. This request piqued Moesly's interest, similar to the boat-ramp episode. Moesly built a prototype, except he centered the console. Initially, there wasn't much demand for Sea Craft's center-console version, but orders for it gradually rolled in. Unlike other undecked boats, this center console was built for the rough waters of the Atlantic Ocean, and thus the "offshore center console" was born. At about this time, late 1963, Sea Craft moved into a new, larger facility near the Miami airport. Thanks to the Sea Craft 21, the bowrider, and

The one-piece grillage—a structural grid system integrating transverse frames and longitudinal stringers—is another idea Moesly claims to have introduced to the industry.

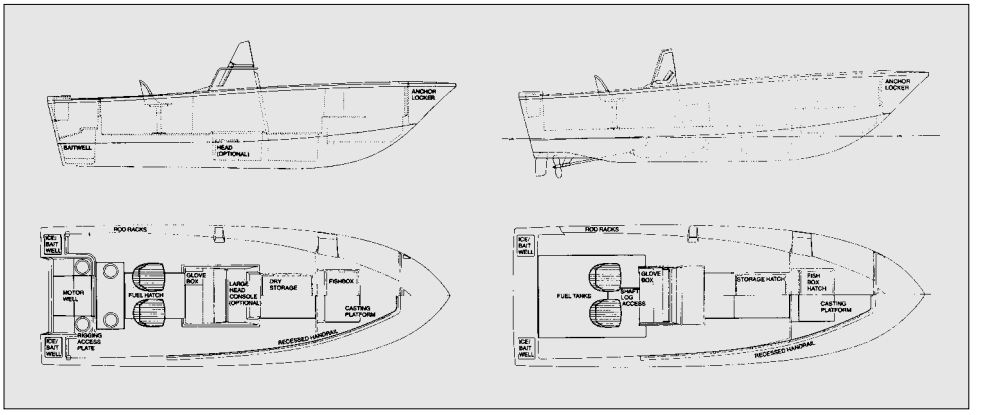
He may or may not have invented the full liner, but Moesly most certainly popularized it. This photo, of a Sea Craft liner moving smartly along without its mating hull, received a lot of national press. The liner concept added structure and flotation in one fell swoop.

now the offshore center console, Sea Craft doubled its production capacity in just three months.

[Note: Boston Whaler was the first builder to come up with the concept of a center console. Whaler, then located in Massachusetts, introduced a 16-footer (4.9m) featuring a plywood control console on the boat's centerline, in 1961—Ed.]

Many builders of the day were using foam to provide flotation. Moesly was dissatisfied with this approach, as it tended to absorb water over time (some things never change), and occasionally granulated with heavy use. Characteristically, Moesly approached the problem from a different angle. Instead of foam, he designed a full interior liner (a strategy praised today by many manufacturers but cursed by service and repair yards) that ran all the way up to the gunwale, essentially forming a double hull that trapped air in the event of a capsize or swamping. As a promotional exercise, Moesly ran one under its own power—that is, liner alone, no hull. The press loved it and photos of the demo were printed in newspapers nationwide. One headline read, "You don't need a hull to have a boat."

Meanwhile, Sea Craft continued to rack up impressive race results. Racing demanded physical endurance from the drivers and crew. In the 1960s, though, the technical aspects of offshore racing were primitive by contemporary standards. For example, when a lower unit blew in one race, Moesly's mechanic and codriver disconnected the steering linkage and, to



Outboard and inboard versions of a Sea Craft 23 (7m), circa 1980. The same hull delivered good performance in both modes, attesting to Sea Craft's reputation for balancing well with variable loads. Gary Hilliard, who for many years headed up new construction at Rybovich (West Palm Beach, Florida), owned and fished a 23 inboard—and loved it. The 23 was also available as an I/O. There was reportedly no significant sacrifice of performance with any of the three types of power.

and he was prepared to do whatever it took to keep them on Sea Craft's payroll.

One Voyage Ends

After eight hectic years, Carl and Jeanne decided the time was right to sell Sea Craft. The work hours had been long, the work load heavy, and Moesly was getting drawn deeper into an aspect of the business he didn't care for: sales.

To the best of Moesly's recollection, Sea Craft endured longer than any other production boatbuilder in Dade County (there were dozens at the time) *under the same ownership and management*. The company was poised for more growth; Moesly began to extend feelers for a potential buyer.

Sea Craft's market reputation and racing success lured a buyer soon enough. In the sale contract, Moesly agreed to stay on for two years as chairman and head of R&D, along with a minority one-fourth ownership. Unfortunately, Moesly disagreed regularly with the new owner's management style, and they clashed over technical and operating issues alike. The new owner's son was now running Sea Craft, and he said to Moesly one day, "You've made a name for yourself in the boat business. Now it's my turn." He was thirty-something.

The new owner and managers struggled with the business; the per-share price of Sea Craft stock dropped

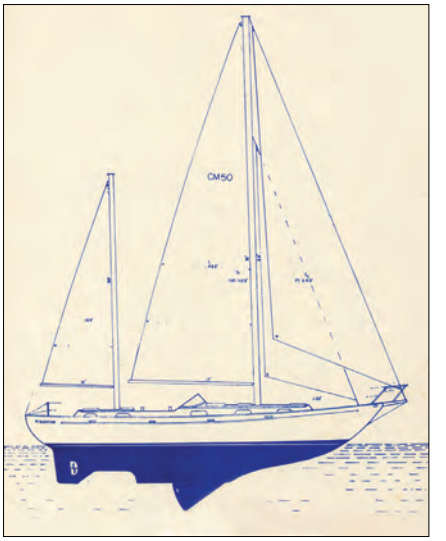
from $5,000 at the time of sale to a penny by the time Moesly was able to depart. In the two years after Moesly left, the company went through several comptrollers and production managers. Manufacturing costs rose, and, as a result, product was being sold below cost. Further difficulties ensued over patent rights and the sale of company stock. While Moesly retained rights to the stepped-hull patent, he did make its use exclusive by the new owner, as part of the deal—an arrangement later tested by that owner. A protracted legal battle began, and today, in hindsight, Moesly regrets not having hired a more "tenacious" attorney.

All told it was an inauspicious end to Moesly's involvement with an incredibly successful venture replete with innovative ideas, specifically: the longitudinally stepped hull, the bowriding cockpit, the application of reverse sheer, the offshore center console, the structural grid system, and the full hull liner. It's a shame, too, that Moesly's creativity was not better utilized by the new ownership. One can only wonder what he might have accomplished had the multiple burdens of management, sales, and company ownership been shed.

Moesly says he doesn't regret getting out of the business when he did. Later, having heard that some of his former offshore-racing rivals had turned to drug smuggling, he knew that both the sport and the businesses behind it had changed forever, and that there could no longer be any satisfaction or pleasure in it for him.

Another Voyage Begins

Once the end of Moesly's involvement in Sea Craft was within sight, Jeanne proposed a vacation. After all, they hadn't taken one longer than a weekend in nearly 10 years. The vacation Moesly had in mind was a circumnavigation aboard a boat Jeanne found for sale in South Florida, a 38′ (11.6m) cold-molded double-ender, built to a William Atkins design. After three months of modifications and preparation, the voyage got under way in 1970, taking the couple on a west-about passage.



The ketch that took the Moeslys on their second global circumnavigation after they'd sold Sea Craft Inc. Carl designed it; the Salthouse yard in Auckland, New Zealand, built it. Carl had come full circle in more ways than one: sail, not power, is where he began his lifelong involvement with boats.

They completed that trip in four years' time, returning to the U.S. coincident with the first oil embargo and other political turmoil of the day. So, after a short respite, they decided to set off once again. For their second voyage, with invaluable cruising experience to draw on, they returned to New Zealand, where they built their next boat, a 50′ (15.2m) ketch to Moesly's design. After one-and-a-half circumnavigations, both Carl and Jeanne had developed some very definite ideas regarding an improved cruiser. Moesly lofted and Salthouse Brothers (Auckland) built the new vessel, and Carl and Jeanne then completed their second circumnavigation by way of New Guinea, the Spice Islands, Bali, the Indian Ocean, and South Africa. Moesly was finally able to keep a vow he'd made to himself three decades previous, while flying a C-54 over the South Pacific: to sail these islands with the blonde ponytailed girl he would marry. It was also on this passage that Moesly made his risky trek through war-torn Rhodesia to see Victoria Falls.

Carl and Jeanne Moesly have remained active in "retirement," building and living in a series of residences ranging from the Virgin Islands to Florida to the Carolinas. Their Salthouse-built ketch—described by one sailing magazine editor as "the ultimate bluewater cruiser"—was sold in 1988.

The Moeslys have owned other boats since, including a well-known brand of trawler-yacht. After piloting the powerboat a few times, Moesly proclaimed its rudder inadequate and proceeded to design a new one. Once built and installed, the steering problem was solved. This episode is emblematic of Moesly's life: see something—be it an aircraft, raceboat, or cruiser; envision a better way; and then act upon that vision. PBB

STEVE D'ANTONIO

A recent photo of Jeanne and Carl Moesly (and their pooch, Dingo), in "active retirement" in western North Carolina.

About the Author: *Steve D'Antonio manages Zimmerman Marine, a full-service yard in Cardinal, Virginia, and is a member of the advisory committee for the Marine Systems program at The Landing School of Boatbuilding and Design (Kennebunkport, Maine).*